



1 Helicopter pole erection. 2 Facility render. 3 Drilling boreholes.

PARAPARAUMU 220kV UPGRADE

AECOM for Transpower

Project Location: Paraparaumu



The methods by which the Paraparaumu 220kV upgrade was executed demonstrate innovation both in technical processes and means of coordination between participating parties. Nothing was “standard” about this job. A small substation site and difficult transmission line location amid steep, rocky ridges called for bespoke design of retaining walls, structures and foundations. Standard layouts and structures were not an option – so innovative solutions had to be found.

AECOM were part of this Transpower project from the outset; early integration of contractors Sparrow and Electrix ensured compatibility of all working methodologies and expectations from early in the process. An unconventional wiki site provided a means by which actively open dialogue could occur throughout the design process. This alignment meant that this project was able to be undertaken at unprecedented speeds with all work still being of the highest calibre. By carefully establishing planning pathways, electrical design was able to be undertaken while construction began – meaning that when the electrical contractors were ready to begin works on-site, they were able to come to a well-developed site with safety procedures already in place and proven.

AECOM was part of the options development team in October 2013, with the client indicating that the existing 110kV line needed to be removed by March 2015 in order for the Transmission Gully roading works to take place. Preliminary design for the several options took place in late 2013, with more detailed design for the preferred option taking place in 2014. Successful public consultation led to the fast tracking of the project with the first construction phase commencing in mid 2014. Today, the substation and transmission lines continue to operate effectively – a testament to AECOM’s wide-reaching work on the project from the outset and the team approach taken by all the parties involved.

Judging & Copyright Statement

This project is an entrant in the 2016 INNOVATE NZ Awards of Excellence competition. The winners will be celebrated at our Awards Gala Dinner on Saturday, 12th August 2017 in Taupo.

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